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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,783	07/09/2003	Hiroomi Torii	FP/E-6-825US 2003-0925A	8565
513	7590	04/09/2004	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			RACHUBA, MAURINA T	
			ART UNIT	PAPER NUMBER
			3723	

DATE MAILED: 04/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/614,783

Applicant(s)

TORII ET AL.

Examiner

M Rachuba

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/9/03
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 6 is objected to because of the following informalities: Claim 6 does not end in a period. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

2. Claims 1-24 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a double-sided heat-sensitive adhesive tape, does not reasonably provide enablement for heat-sensitive adhesive tape without adhesive on both sides of the tape. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims. Applicant may overcome this rejection by claiming that the heat-sensitive adhesive tape is double-sided or has adhesive on both surfaces of the tape.
3. Claims 1-24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification is specific in that double-sided, or tape with heat-sensitive adhesive applied to both surfaces of the tape must be used to bond the components together. See pages 10-11 of the pending specification. The claims are not enabling for a single sided, or adhesive on only one surface, tape. Applicant may overcome this

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rejection by the heat-sensitive adhesive tape is double-sided or has adhesive on both surfaces of the tape.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-24 are incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: that the tape has adhesive on both sides.
6. Claim 15 recites the limitation "said jig" in line 2. There is insufficient antecedent basis for this limitation in the claim. Claim 15 depends from claim 14, which depends from independent claim 10. The jig is first claimed in claim 11.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 17-24 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Ettinger, 6,422,921. Please refer to columns 2, 3 and 4 for a complete discussion of the adhesive used, and the method of using it.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-5, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ettinger 6,422,921 in view of Anker et al, 6,391,679. '921 discloses adhering a polishing cloth to a platen with heat-sensitive adhesive, the adhesive being switchable between adhesive and non-adhesive states, the platen having heating and cooling elements to effect change in the adhesive state. '921 does not disclose that the adhesive is in the form of adhesive tape. '697, column 7, lines 62- column 8, lines 12, teaches that it is old and well known in the art of substrate polishing to use heat-sensitive adhesive tape to bond components together. It would have been obvious to

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one of ordinary skill to have provided '921 with the adhesive tape taught by '679, column 7, lines 62- column 8, lines 12, to simplify the application of adhesive to the platen.

11. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desorcie et al, 5,885,135 in view of Anker et al, 6,391,679. '135 discloses adhering a backing film to a carrier. '135 does not disclose using heat-sensitive adhesive tape. '697, column 7, lines 62- column 8, lines 12, teaches that it is old and well known in the art of substrate polishing to use heat-sensitive adhesive tape to bond components together, the heat-sensitive adhesive allowing the components to be cleanly separated, the adhesive in tape form allowing easy application of the tape to the components. It would have been obvious to one of ordinary skill to have provided '921 with the heat-sensitive adhesive tape taught by '679, column 7, lines 62- column 8, lines 12, to allow the components to be easily bonded and separated.

12. Claims 10, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima 6,159,088 in view of Anker et al, 6,391,679. '088, column 1, lines 59 through column 2, lines 9, discloses a platen having a polishing pad adhered to it, and a carrier head having a backing film attached to it. '088 does not disclose that the pad or backing film are adhered with a heat-sensitive adhesive tape. '697, column 7, lines 62- column 8, lines 12, teaches that it is old and well known in the art of substrate polishing to use heat-sensitive adhesive tape to bond components together, the heat-sensitive adhesive allowing the components to be cleanly separated, the adhesive in tape form allowing easy application of the tape to the components. It would have been obvious to

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one of ordinary skill to have provided '088 with the heat-sensitive adhesive tape taught by '679, column 7, lines 62- column 8, lines 12, to allow the components to be easily bonded and separated.

13. Claims 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakajima '088 as modified by Anker et al '679 as applied to claim 10 above, and further in view of Ettinger '921. '088 as modified by '679 does not disclose a jig for heating or cooling the components to soften the heat-sensitive adhesive. '921 teaches providing a jig column 4, lines 8-9, of any shape, to change the state of the heat-sensitive adhesive. It would have been obvious to one of ordinary skill in the art to have provided '088 as modified by '679 with a method of using a jig to heat the adhesive and separate the components as taught by '921, to allow the heat-sensitive adhesive to be used with devices which do not have built-in heating or cooling devices..

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other similarly bonded components used in wafer polishing are cited of interest.

15. Any inquiry concerning the content of this communication or earlier communications from the examiner should be directed to M. Rachuba whose telephone number is (703) 308-1361. The examiner can normally be reached on Monday through Friday from 8:30 AM to 4:00 PM. Any inquiries concerning other than the content of this and previous communications, such as missing references or filed papers not

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acknowledged, should be directed to the Customer Service Representative, Tech Center 3700, (703) 306-5648.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail, can be reached on (703) 308-2687.

In lieu of mailing, it is encouraged that all formal responses be faxed to 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1148.

M. RACHUBA  
PRIMARY PATENT EXAMINER  
ART UNIT 3723



mtr  
April 7, 2004